



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D2611**Job Sheet 199103****Part No:** D2611**Job Qty:** 20 pcs**Part Name:** Bearing**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 8/12/19**Job Tracking No:****Due Date:** 12/2/19**Created By:** Marie Lajeunesse**Type:** SOLD**Description:****Note:** DWG REV C IPP Rev:B 99.06.23 Re-format DM Change to SS; Change Supplier- Rev.C 07.03.14 EC**Ship Via:****Bill of Materials****Job Routing**

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier Lead Time	
100	Purchasing <i>Master</i>	20 pcs	12/2/19	12/2/19	0.00	0.00	Purchasing - 1	<i>MC</i> OCT 9 2019
							Purchasing - 2	
							Purchasing - 3	
110	Packaging 2-1 - Receive - B4B	20 pcs	12/2/19	12/2/19	0.00	0.00	Packaging 2 - 1 - B4B	
							Packaging 2 - 2 - B4B	
							Packaging 2 - 3 - B4B	
							Packaging 2 - 5 - B4B	
							Packaging 2 - 4 - B4B	
							Packaging 2 - 6 - B4B	
							Packaging 2 - 7 - B4B	
							Packaging 2 - 8 - B4B	
							Packaging 2 - 9 - B4B	
							Packaging 2 - 10 - B4B	
							Packaging 2 - 11 - B4B	
							Packaging 2 - 12 - B4B	
							Packaging 2 - 13 - B4B	
							Packaging 2 - 14 - B4B	
							Packaging 2 - 15 - B4B	
							Packaging 2 - 16 - B4B	
							Packaging 2 - 17 - B4B	
							Packaging 2 - 18 - B4B	
							Packaging 2 - 19 - B4B	
							Packaging 2 - 20 - B4B	
							Packaging 2 - 21 - B4B	
							Packaging 2 - 22 - B4B	
							Packaging 2 - 23 - B4B	
							Packaging 2 - 24 - B4B	
							Packaging 2 - 25 - B4B	
							Packaging 2 - 26 - B4B	
							Packaging 2 - 27 - B4B	
							Packaging 2 - 28 - B4B	

**Container No:** S221193**Part:** D2611**Job No:** 199103**Serial No/Batch:** S221193**Revision:****Inspector:****Exp Date:****Instructions:** Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 10/09/19

Plex 8/12/19 4:17 PM Dart.lajeunesse.marie

					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
120 QC 6	20 pcs	12/2/19	0.00	0.00	QC 6 - 9	
					QC 6 - 68	DAS
					QC 6 - 61	61
					QC 6 - 40	9-89
					QC 6 - 81	
130 Packaging 3-1 - Stock - B4B	20 pcs	12/2/19	0.00	0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	PC St 008A
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
140 QC 21 - SA	20 pcs	12/2/19	0.00	0.00	QC 21 - SA - 21	DAS
					QC 21 - SA - 70	21
					QC 21 - SA - 53	9-89

Part Op 100 - Purchasing - Issue P/O: _____ Purchase part as per Dwg D2611 Possible supplier: McMaster or CTG P/N:
 Descriptions: 63215K34

110 - Receive & Inspect for Damage & Mat'l Certs - Ensure certificate of conformity is attached

120 - QC6- All purchased or subcontracted products)

130 - Identify as per dwg & Stock Location: _____

140 - QC21- Final Inspection - Work Order Release

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
63215K34	Bearing (D2611)	20 Ea (1 ea)	100-Purchasing	S221152
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	63215K34	20	0	0
Part Specifications				
Specifications could not be found.				

Plex 8/12/19 4:17 PM Dart.lajeunesse.marie



DESIGN <i>GP</i>	DRAWN BY <i>CB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D2611	REV. C SHEET 1 OF 1
DATE 06.09.20		TITLE BEARING	SCALE NTS
REV	DATE	DESCRIPTION	
A	97.07.31	NEW ISSUE	
B	01.07.04	RE-DRAWN	
C	06.09.20	CHANGE TO SS; CHANGE SUPPLIER	

SPECIFICATION CONTROL DRAWING

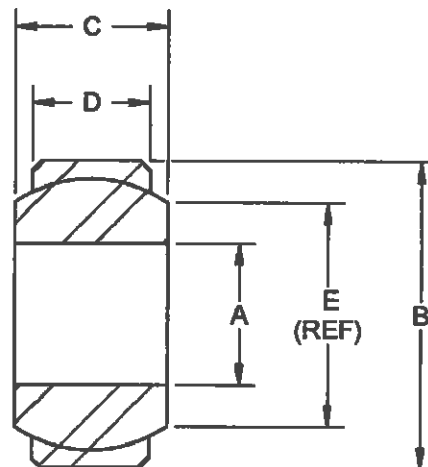
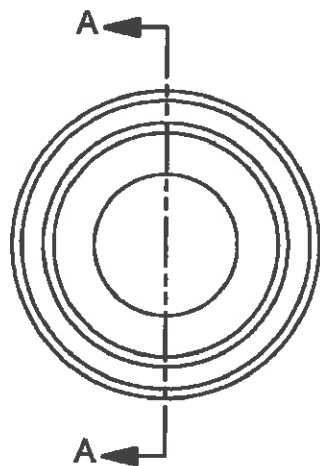
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

WORK ORDER
NO. *199103 MWS*
19-08-12



RELEASED

06.11.17 *#*



SECTION A-A



A	B	C	D	E (REF)	POSSIBLE SUPPLIER
0.375	0.813	0.406	0.313	0.592	McMASTER-CARR P/N 63215K34

NOTES:

- 1) STAINLESS STEEL BALL JOINT SWIVEL BEARING
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

COPYRIGHT © 1997 BY DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Entered: _____

Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐		DEPARTMENT/PROCESS		MRB (Q51042)																											
Date : _____		Sequence #: _____		QTY Affected : _____																													
Description Work Order Deviation		Disposition																															
Root Cause		FAULT CATEGORY																															
Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Pressure/Forced</td> <td style="width:15%;">Contamination</td> <td style="width:15%;">Power Loss/Surge</td> <td style="width:15%;">Positioned Wrong</td> </tr> <tr> <td>Bending ☐</td> <td>Misaligned/off center ☐</td> <td>Folio/Program ☐</td> <td>Outside Tolerance ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>BOM/Route ☐</td> <td>Grain Direction ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Finish ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave/Twist ☐</td> <td>Incomplete/Unclear Instructions ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Out of Sequence ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Mislabeled ☐</td> <td>Fit/Function ☐</td> <td>Off-set/Set-up ☐</td> <td></td> </tr> </table>				Pressure/Forced	Contamination	Power Loss/Surge	Positioned Wrong	Bending ☐	Misaligned/off center ☐	Folio/Program ☐	Outside Tolerance ☐	Crushing ☐	BOM/Route ☐	Grain Direction ☐	Drawing ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Finish ☐	Crimp/Kink/Ripple/Wave/Twist ☐	Incomplete/Unclear Instructions ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Marks/Chatter ☐	Drill Holes ☐	Out of Sequence ☐	Misread ☐	Mislabeled ☐	Fit/Function ☐	Off-set/Set-up ☐	
Pressure/Forced	Contamination	Power Loss/Surge	Positioned Wrong																														
Bending ☐	Misaligned/off center ☐	Folio/Program ☐	Outside Tolerance ☐																														
Crushing ☐	BOM/Route ☐	Grain Direction ☐	Drawing ☐																														
Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Finish ☐																														
Crimp/Kink/Ripple/Wave/Twist ☐	Incomplete/Unclear Instructions ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																														
Marks/Chatter ☐	Drill Holes ☐	Out of Sequence ☐	Misread ☐																														
Mislabeled ☐	Fit/Function ☐	Off-set/Set-up ☐																															
Other/Details: _____		Completed By _____																															
_____		Lead hand / Supervisor _____																															
_____		QC / QA Coordinator _____																															



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044670



Supplier: MCM001-VU
McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690 USA
Phone: 330 995 5500
Fax: 330 995 9600

Attention: N/A,

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A-1K7 Canada
Phone: 613-632-5200

PO No: POHB044670

PO Date: 10/2/19

Due Date: 10/7/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pymt Terms: 2% 10 Net 30

Freight Terms:

Special Comments:

E-MAILED
2019-10-03

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		91773A833	50/pk	Phillips Round Head Screw, 10-32 UNF -2A X 1	Firmed X50	-	10/7/19	50 Ea	0 Ea	50 Ea	\$0.123/Ea	\$6.15
2		20NR-34	91253A544	Keeper Handle Screw	Firmed X50	-	10/7/19	50 Ea	0 Ea	50 Ea	\$0.1666/Ea	\$8.33
3		6630T220	1/pk	Black Polypropylene Ball Knob with M8X 1.25 Threaded Hole X 32 mm Head Dia.	Firmed X10	-	10/7/19	10 Ea	0 Ea	10 Ea	\$1.35/Ea	\$13.50
4		7767T61	6 ft	Low-Carbon Steel Round Tube, 0.188" Wall Thickness, 3/4" OD	Firmed X6	-	10/7/19	6 ft	0 ft	6 ft	\$6.16666/ft	\$37.00
5		8644K12	10 lbs	80A Liquid Urethane	Firmed X1	-	10/7/19	1 pcs	0 pcs	1 pcs	\$217.22/pcs	\$217.22
6		89955K998	3 ft length	Tube	Firmed X18	-	10/7/19	18 ft	0 ft	18 ft	\$14.8133/ft	\$266.64
7		90272A247	100/pk	Zinc Plated Steel Pan Head Phillips Screw #10-24 X 1" Long	Firmed X100	-	10/7/19	100 Ea	0 Ea	100 Ea	\$0.0654/Ea	\$6.54



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044670



Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
8		90272A261	10/pk	Pan Head Screw 10-24X4.0"-Zinc Plated	Firmed - X10		10/7/19	10 Ea	0 Ea	10 Ea	\$1.061/Ea	\$10.61
9		90685A110	25/pk	Hex Nut M12 X 1.75mm	Firmed - X95		10/7/19	25 Ea	0 Ea	25 Ea	\$0.3808/Ea	\$9.52
10		90866A011	100/pk	Wing Nut 10-24 Zinc Plated	Firmed - X100		10/7/19	100 Ea	0 Ea	100 Ea	\$0.0943/Ea	\$9.43
11		91595A150	50/pk	Dowel Pin ØM4 x 8mm	Firmed - X50		10/7/19	50 Ea	0 Ea	50 Ea	\$0.1746/Ea	\$8.73
12		92141A011	100/pk	18-8 Stainless Steel Washer #10 Screw Size, 0.203" ID, 0.438" OD	Firmed - X100		10/7/19	100 Ea	0 Ea	100 Ea	\$0.0233/Ea	\$2.33
13		93275A034	1/pk	Rod	Firmed - X2		10/7/19	2 Ea	0 Ea	2 Ea	\$2.93/Ea	\$5.86
14		97524A032	100/pk	Sealing Blind Rivet	Firmed - X100		10/7/19	100 Ea	0 Ea	100 Ea	\$0.0982/Ea	\$9.82
15		MDELINR2.500W	8572k32 5ft len	Delrin Round Bar 2.500	Firmed - X574		10/7/19	5 ft	0 ft	5 ft	\$31.64/ft	\$158.20
16		MT-O1-R1.375	8893K103 3 ft	Tool Steel Round Bar 1.375 dia. : Material: AISI 01 TOOL STEEL ROUND BAR DIN 1.2510 or B.S. BO 1 or SAE J437 or SAE J438 or UNS T31501 or ASTM A681	Firmed - X3ft		10/7/19	3 ft	0 ft	3 ft	\$22.80666/ft	\$68.42
17	199103	63215K34		Bearing (D2611)	Firmed - X20		10/7/19	20 Ea	0 Ea	20 Ea	\$18.58/Ea	\$371.60
18	201312	98470A133		Pin, Quick Release D4811-1	Firmed - X20		10/7/19	20 pcs	0 pcs	20 pcs	\$3.23/pcs	\$64.60
Grand Total:											\$1,274.50	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044670



Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/2/19 4:14 PM Dart.Guerin.Kimberley

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
POHB044670

Order Placed By
Kimberley Guerin

McMaster-Carr Number
3117734-03

Page 1 of 1

10/03/2019

Line	Product	Ordered	Shipped	
1	91773A833 Stainless Steel Decorative Round Head Phillips Screws, 10-32 Thread Size, 1" Long, Packs of 50	1 Pack	1	✓
2	91253A544 Black-Oxide Alloy Steel Hex Drive Flat Head Screw, 1/4"-20 Thread Size, 1-1/4" Long, Packs of 50	1 Pack	1	✓
3	6630T22 Black Polypropylene Ball Knob with M8 x 1.25mm Threaded Hole, 32mm Head Diameter	10 Each	10	✓
5	8644K12 Urethane Casting Compound, 80A Hardness, 10 lb. <i>exp. DATE = 12/31/2019</i>	Each		✓
7	90685A110 High-Strength Steel Hex Nut, Class 10, M12 x 1.75 mm Thread, Packs of 25	1 Pack	1	✓
8	90866A011 Zinc-Plated Steel Wing Nut, 10-24 Thread Size, 13/32" Base Diameter, Packs of 100	1 Pack	1	✓
9	91595A150 Dowel Pin, 52100 Alloy Steel, 4 mm Diameter, 8 mm Long, Packs of 50	1 Pack	1	✓
10	92141A011 18-8 Stainless Steel Washer for Number 10 Screw Size, 0.203" ID, 0.438" OD, Packs of 100	1 Pack	1	✓
11	93275A034 Setup Stud, M8 Thread Size, 110 mm Long, .31 mm Long Threads	2 Each	2	✓
12	97524A032 Sealing Blind Rivets, Domed Head, with Aluminum Mandrel, 1/8" Diameter, 0.425" Long, Packs of 100	1 Pack	1	✓
15	63215K34 Corrosion-Resistant Swivel Joint, Lubrication-Free, 3/8" ID, 13/16" OD	20 Each	20	✓
16	98470A133 Shoulder-Style Ring-Grip Quick-Release Pin, 18-8 Stainless Steel, 1/4" Diameter, 1-5/16" Usable Length	20 Each	20	✓

DAS
61
9-89

Certificate of compliance

This is to certify that the above items were supplied in accordance with the description and as illustrated in the catalog. Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

Sarah Weinberg
Sarah Weinberg
Compliance Manager